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Hypocassida convexipennis, a new species from Iran
(Coleoptera: Chrysomelidae: Cassidinae)

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ABSTRACT. *Hypocassida convexipennis* new species is described from Iran. It is the third species of the genus, well characterized by a strongly convex elytral disc.

Key words: entomology, taxonomy, new species, *Coleoptera*, *Chrysomelidae*, *Cassidinae*, *Hypocassida*, Iran.

The genus *Hypocassida* WEISE, 1893 comprised hitherto only two species: *H. meridionalis* (SUFFRIAN, 1844) from Mediterranean Subregion, especially its western part, and *H. subferruginea* (SCHRANK, 1776) common and widespread in the western Palaearctic, east to the western provinces of China (BOROWIEC 1999). They were redescribed in many papers on European beetles, the last perfect descriptions with notes on their bionomics and preimaginal stages, including colour photos, had been published in a monograph of the *Cassidinae* of France (BORDY 2000). In the material sent to me by Kamil ORSZULIK (Frydek-Mistek, Czech Republic) I found two specimens of *Hypocassida* representing a new species. Its description is given below.

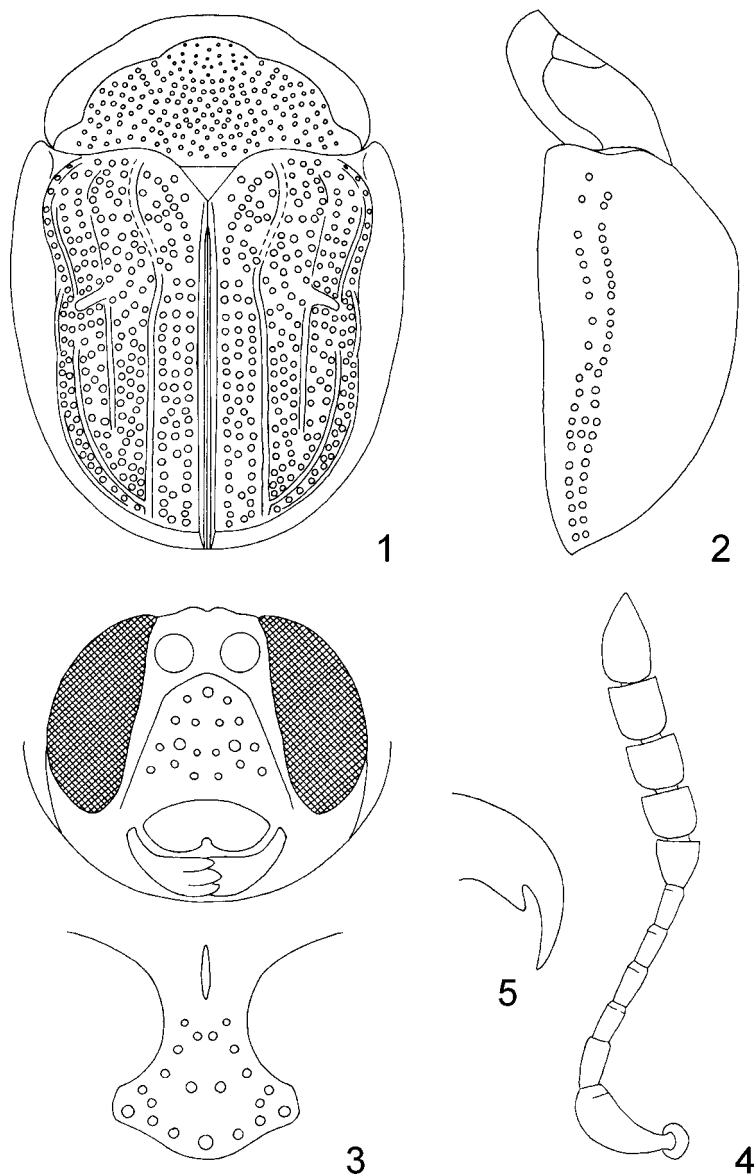
***Hypocassida convexipennis* n. sp.**

ETYMOLOGY

The name refers to the strongly convex elytral disc.

DIAGNOSIS

H. convexipennis at first glance differs from both its congeners in a more convex elytral disc. The best distinctive character is the structure of tarsal claws - in *H. convexipennis* claws are toothed, while in both congeners they are simple.



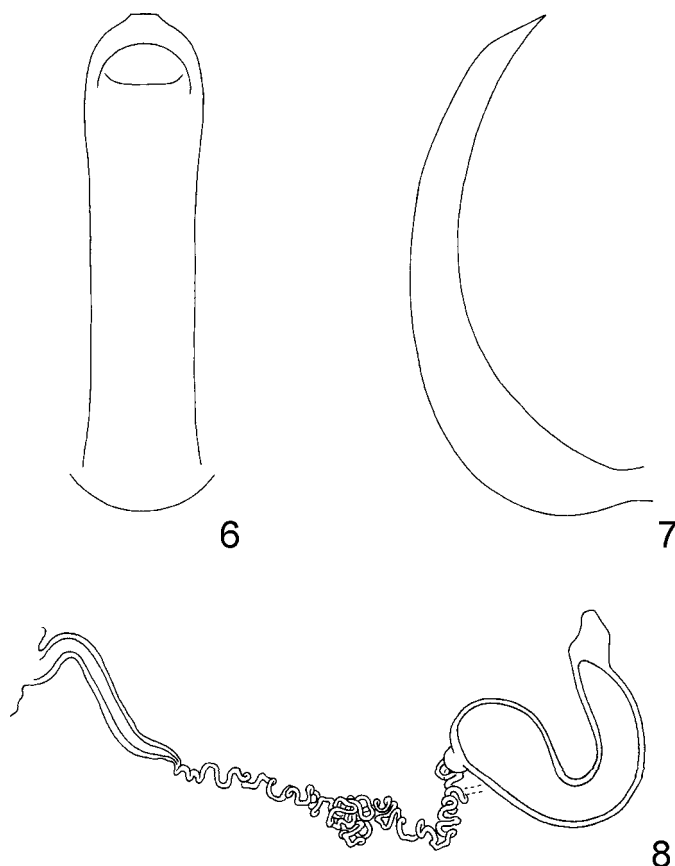
1-5. *Hypocassida convexipennis*: 1 - body in dorsal view, 2 - body in lateral view, 3 - head and prosternum, 4 - antenna, 5 - tarsal claw

Denticles of basal margin of elytron in *H. convexipennis* are slightly larger than in *H. subferruginea* but distinctly smaller than in *H. meridionalis*, the basal margin of elytron is shallowly emarginate like in *H. subferruginea*.

DESCRIPTION

Length: male 5.5 mm, female 6.5 mm, width: male 3.7 mm, female 4.4 mm, length of pronotum: male 2.1 mm, female 2.3 mm, width of pronotum: male 3.1 mm, female 3.6 mm, length/width ratio: male 1.49, female 1.51. Body oval.

Pronotum brown, explanate margin slightly paler, yellowish-brown. Elytral disc yellowish-brown to brown, explanate margin yellowish-brown, some punctures, especially in postscutellar area, along base and sides of each elytron, and on slope with dark brown to black areolae. Clypeus and abdomen yellowish, thorax black. Legs and antennae yellowish, apex of last antennal segment slightly infusate.



6-8. *Hypocassida convexipennis*, genitalia: 6 - aedeagus dorsal, 7 - aedeagus lateral, 8 - spermatheca

Pronotum elliptical, with maximum width in middle, sides broadly rounded, no basal corners. Disc moderately convex, indistinctly bordered from explanate margin, with well separated area above head. Surface of top of disc with moderately coarse and dense puncturation, distance between punctures mostly as wide as puncture diameter, surface between punctures smooth and glabrous. On sides of disc puncturation dense, punctures almost touching each other and surface of disc appears slightly rugose. Explanate margin shallowly punctate, its surface appears slightly irregular.

Scutellum triangular. Base of elytra slightly wider than base of pronotum, sides only slightly rounded and slightly converging posterad, apex rounded (fig. 1). Humeri moderately protruding anterad, rounded. Anterior margin of elytron shallowly emarginate with row of moderately large black denticles. Disc in profile strongly convex, with top of convexity in postscutellar point (fig. 2), in postscutellar area without impressions. Each disc with three longitudinal costae in position of 3rd, 5th and 7th intervals, first costa elongate, distinct on whole length of elytron but in anterior third low, bordering postscutellar area, in middle moderately convex and on slope strongly convex; costae second and third short, well visible only in middle of disc, third costa in holotype distinct only on slope; also submarginal interval distinctly convex. Puncturation of disc coarse and dense, distance between punctures smaller than puncture diameter, in anterior half of disc irregular, in posterior part of disc with tendency to form regular rows. Marginal and submarginal rows distinct, regular, but marginal interval behind middle with few additional irregular punctures. Explanate margin of elytra strongly declivous, in the widest part slightly narrower than 1/3 width of elytron disc, with dense, very shallow puncturation, surface appears slightly irregular. Apex of elytral epipleura with short, sparse, erect hairs.

Head broad, eyes large, gena very short. Clypeus c. 1.2 times wider than long, with distinct clypeal lines converging in slightly angulate arch, surface with several moderately coarse punctures. Labrum with small median emargination. Venter of pronotum with deep antennal groove, bordered externally by sharp carina. Prosternal collar on each side with distinct lateral plate, distinctly emarginate below plates. Prosternal process broad, expanded apically, in anterior part with short median sulcus, in middle with few small punctures and along apical margin with row of coarse punctures (Fig. 4).

Antennae stout, segments 8-10 slightly wider than long. Length ratio of antennal segments: 100:55:50:55:50:55:55:57:65:110, segment 3 distinctly shorter than segments 2 and 4 (fig. 5). Claws with distinct basal tooth (fig. 6).

Aedeagus as in figs 6, 7; spermatheca typical for the genus, with quite short ductus, but spiral part of ductus slightly longer than in both congeners (see figures in BORDY & DUGET 1987).

TYPE MATERIAL

Holotype male: "IRAN, Horramabad [c. 180 km SW of Teheran, Zagros Mts., hills with steppe vegetation], 12.5.1999, lgt. ORSZULIK"; paratype female: the same data (holotype preserved at the Department of Systematic Zoology and Zoogeography, Wrocław University, Wrocław, Poland, paratype in coll. K. ORSZULIK, Frydek-Mistek, Czech Republic).

REMARKS

In many European papers, including BORDY's (2000) last monograph, *Hypocassida* has been treated as a subgenus of the highly speciose genus *Cassida* LINNAEUS, 1758. In my opinion it is an inappropriate view because *Hypocassida* WEISE is closer to Afrotropical genera *Acrocassis* SPAETH, 1922, *Erbolaspis* SPAETH, 1924 and *Trigonocassis* HINCKS, 1950 than to the genus *Cassida* L. All these genera are well characterized by venter of pronotum with deep antennal grooves, bordered externally by sharp carina, and prosternal collar with lateral emargination, and also by short third antennal segment, not or only slightly longer than second segment. The combination of these characters does not occur in members of the genus *Cassida*, although more or less developed antennal grooves have been observed in some species of *Cassida*, but never with sharp external carina.

ACKNOWLEDGEMENTS

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